

What is claimed is:

1. A valve for an implantable fluid delivery system comprising:
a fluid chamber having a fluid inlet and a fluid outlet; and
an internal magnet disposed within the fluid chamber, the internal magnet being
5 moveable such that displacement of the internal magnet restricts the flow of fluid through
the fluid chamber.
2. A valve according to claim 1, further comprising:
an external magnet for disposition on the skin of a subject, the external magnet
providing a magnetic field for displacing the internal magnet such that fluid flow through
10 the fluid chamber is restricted when the internal magnet occupies a first position and fluid
flow through the fluid chamber is not restricted when the internal magnet occupies a
second position.
3. A valve according to claim 2, wherein the external magnet is rotatable.
4. A valve according to claim 1, wherein the fluid chamber is implanted in a
15 subject's ear.
5. A valve according to claim 1, wherein the fluid chamber is implanted in a part of
a subject's skull.
6. A valve according to claim 1, wherein the internal magnet is formed from a
biocompatible material.
- 20 7. A valve according to claim 1, wherein the fluid chamber includes a first anchor
and a second anchor for preventing rotation of the internal magnet.
8. A valve according to claim 7, wherein the anchors are formed from a
ferromagnetic material.
9. A valve according to claim 1, wherein the fluid chamber is formed from a non-
25 ferromagnetic material.
10. A valve according to claim 1, wherein the internal magnet is spherical.
11. A valve according to claim 1, wherein the internal magnet is cylindrical.
12. A valve according to claim 1, wherein the fluid chamber includes an anchor for
securing the internal magnet in the fluid chamber.
- 30 13. A valve according to claim 12, wherein one pole of the internal magnet includes
one or more grooves for permitting fluid flow through the fluid chamber when the
internal magnet is secured by the anchor.
14. A valve according to claim 12, wherein the internal magnet is coated with a non-
ferromagnetic material.

15. A valve according to claim 14, wherein the non-ferromagnetic material is silicone.
16. A valve according to claim 12, wherein the internal magnet is coated at one pole with a non-ferromagnetic material.
17. A valve according to claim 16, wherein the coating includes one or more grooves
5 for permitting fluid flow through the fluid chamber when the internal magnet is secured by the anchor.
18. A valve according to claim 12, wherein one pole of the internal magnet includes a recess for permitting fluid flow through the fluid chamber when the internal magnet is secured by the anchor.
- 10 19. A valve according to claim 12, wherein one pole of the internal magnet includes a semi-permeable material for permitting fluid flow through the fluid chamber when the internal magnet is secured by the anchor.
20. A valve according to claim 12, wherein the anchor is formed of a ferromagnetic material.
- 15 21. A valve according to claim 1, further comprising an external indicator for checking the displacement of the internal magnet.
22. A valve according to claim 21, wherein the external indicator includes a compass.
23. A valve according to claim 2, wherein the external magnet includes a first magnet having a magnetic moment oriented in a first direction and a second magnet having a
20 magnetic moment oriented in a second direction such that the external magnet automatically aligns with the internal magnet.
24. A valve according to claim 23, wherein the first magnet is cylindrical and the second magnet is ring-shaped.
25. A valve according to claim 2, wherein the external magnet is confined in a
25 housing such that the external magnet is capable of experiencing horizontal displacement such that it automatically aligns with the internal magnet.
26. A valve according to either of claims 1 or 2, wherein the fluid delivery system is includes a cochlear implant.
27. A valve according to claim 1, wherein the fluid chamber including a catheter
30 having the fluid inlet and the fluid outlet and wherein the internal magnet is moveable such that displacement of the internal magnet restricts the flow of fluid through the catheter.
28. A valve according to claim 27, further comprising:
an external magnet for disposition on the skin of a subject, the external magnet

providing a magnetic field for displacing the internal magnet such that fluid flow through the catheter is restricted when the internal magnet occupies a first position and fluid flow through the catheter is not restricted when the internal magnet occupies a second position.

29. A fluid switch for an implantable fluid delivery system comprising:

5 a fluid chamber having a fluid inlet and a fluid outlet; and
an internal magnet disposed within the fluid chamber, the internal magnet being moveable such that displacement of the internal magnet restricts the flow of fluid through the fluid chamber.

30. A fluid switch according to claim 29, further comprising:

10 an external magnet for disposition on the skin of a subject, the external magnet providing a magnetic field for displacing the internal magnet such that fluid flow through the fluid chamber is restricted when the internal magnet occupies a first position and fluid flow through the fluid chamber is not restricted when the internal magnet occupies a second position.

15 31. A fluid switch according to claim 29 wherein the fluid chamber includes a catheter having the fluid inlet and the fluid outlet and wherein the internal magnet is moveable such that displacement of the internal magnet restricts the flow of fluid through the catheter.

32. A fluid switch according to claim 31, further comprising:

20 an external magnet for disposition on the skin of a subject, the external magnet providing a magnetic field for displacing the internal magnet such that fluid flow through the catheter is restricted when the internal magnet occupies a first position and fluid flow through the catheter is not restricted when the internal magnet occupies a second position.

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